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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,563	12/30/2004	Ralph Mende	03100219AA	2829

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EXAMINER

GREGORY, BERNARR E

ART UNIT PAPER NUMBER

3662

DATE MAILED: 08/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/519,563

Applicant(s)

MENDE, RALPH

Examiner

Bernarr E. Gregory

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

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1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

On line 4 of independent claim 1, there is a typographical error immediately following the word "characterizing." It appears that "int hat" was intended to be "in that."

On line 5 of claim 1, the phrase "designed to transmit" is indefinite and unclear in context in that it does not clearly and definitely state a characteristic of the claimed "transmitting antenna array."

On line 7 of claim 1, the phrase "configured to receive reception signals" is indefinite and unclear in context in that it does not clearly and definitely state a characteristic of the claimed "receiving antenna array."

On line 8 of claim 1, the phrase "reflected in both" is unclear in context. It would appear that applicant does not mean that reception is limited to signals that have been reflected in BOTH "radiation areas"; rather, it would seem that applicant would mean that there is reception from EITHER of the "radiation areas."

Independent 1 is indefinite and unclear in that line 1 of claim 1 states that the claim is directed to a "sensor," but the remainder of the claim only recites a "housing" and two antenna arrays. It is noted that claim 1 is written such that

there is no preamble with a transitional word or phase. Without an open-ended transitional phrase (e.g., “comprising”), claim 1 must be read as being limited to what is recited. It is unclear how two antenna arrays and a housing can make up a sensor.

On line 2 of dependent claim 2, the phrase “transmitting antenna is actuated in such a way that ...” is indefinite and unclear in that the claim language fails to set forth clearly and definitely how the “transmitting antenna” is “actuated” and by what it is actuated in order to perform what is recited in the functional language (i.e., “actuated in such a way that the main radiation area is at an acute angle to a geometric orientation ...”).

In claims 2, 3, and 8, “the transmitting antenna” lacks antecedent basis in that it may not refer to the earlier-named “transmitting antenna array” as recited on lines 1-2 of claim 1.

On line 3 of dependent claim 7, the phrase “configured to receive reception signals ...” is indefinite and unclear in context in that the claim language fails to claim clearly and definitely how the “at least one receiving antenna” is “configured” such that it can perform the task recited functionally in the claim (i.e., “to receive reception signals which are reflected ...”).

On line 2 of claim 9, “the at least one receiving antenna” lacks antecedent basis.

On line 2 of claim 10, the phrase “configured to transmit and receive radar signals” is indefinite and unclear in that the claim language fails to set forth

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clearly and definitely what is "configured" and how it is "configured" so as to receive radar signals.

On line 2 of claim 10, the pronoun "it" lacks clear antecedent basis.

Dependent claims 2-11 are unclear in that they depend from unclear independent claim 1.

3. Sole independent claim 1 and its dependent claims 2-11 are so indefinite and unclear that it is not possible at this time to indicate if allowable subject matter is present in the claims.

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


The examiner-cited prior art is of interest for showing prior art radar systems using separate transmit and receive antennae, where the transmit and receive patterns cover more than one direction.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernarr E. Gregory whose telephone number is (571) 272-6972. The examiner can normally be reached on weekdays from 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas H. Tarcza, can be reached on (571) 272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Bernarr E. Gregory  
Primary Examiner  
Art Unit 3662